

times. Its presence south of the United States is due to former glacial influences, and it is evident that such forms are the lowest and most generalized. The *trichas* group represents its highest development.

I would extend the present accepted southern limit of the Nearctic subregion to include nearly all of the West Indies, Central and South America, and consider its life as an invasion and overlaying of the Neotropical region consequent upon the effects of a glacial period. Neotropical life now barely reaches the United States. Present winter North American life represents a transition between the original Palæarctic, from which it has been derived, and the pure Nearctic, an earlier result, of which *Geothlypis* is an example.

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NOTES ON A FEW SPECIES OF IDAHO AND WASHINGTON BIRDS.

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DURING the year 1894 the following notes were made in northern Idaho and Washington. Specimens of each species mentioned were taken and preserved. The localities visited were Kaniksu Lake, Blue Lake, Hoodoo Lake, and Spirit Lake in Kootenai Co., Idaho; Diamond Lake in Stevens Co., Mt. Carleton in Spokane Co., and Pullman in Whitman Co., Washington.

1. *Merganser americanus*. AMERICAN MERGANSER.—Several females with young observed at Diamond Lake, where downy young were taken, June 21.

2. *Anas boschas*. MALLARD.—Very common in Hoodoo Valley during August, when females with large flocks of young were frequently seen. No males were taken. Also seen at Lake Kaniksu.

3. *Aythya americana*. REDHEAD.—Lake Kaniksu and Hoodoo Valley. Young were seen at the latter place, Aug. 18.

4. *Branta canadensis*. CANADA GOOSE.—One flock, from which three specimens were taken, was seen near Kaniksu Lake, July 26.

5. *Porzana carolina*. SORA.—Common at Hoodoo Lake and the adjacent marshes where the downy young were taken Aug. 13.

6. *Fulica americana*. AMERICAN COOT.—Very abundant at Hoodoo Lake, where on Aug. 13, young measuring from 243 to 282 mm. long were taken.

7. *Gallinago delicata*. WILSON'S SNIPE.—Two specimens were collected near Pullman, Jan. 21, when the ground was covered with snow. Specimens were also taken at Blue Lake.

8. *Ægialitis vocifera*. KILLDEER.—Common at Pullman. Observed in the spring as early as March 1.

9. *Dendragapus obscurus richardsonii*. RICHARDSON'S GROUSE.—Commonly known as 'Blue Grouse.' They were abundant in the vicinity of Blue Lake from the 12th until the 30th of July. During this time the females and young were migrating from higher altitudes. They were abundant on the foothills east of Hoodoo Valley during the latter part of August. None were seen in the lower parts of the valley. No males were observed.

The small young have a pointed tail of three or four feathers with white shaftlines. Later, when the more permanent feathers grow out, the tail consists of a dark colored, square cut basal part, beyond which the lighter feathers project. When the dark feathers have grown to be as long as the lighter ones the latter are shed.

When disturbed, the mother and young usually took to the nearest trees and quietly observed the intruder. Both old and young were very tame, and while foraging they frequently came into camp. Once, on looking up from my work, I saw a female quietly walking out of my tent, while her five young were searching for food near by.

10. *Canachites franklinii*. FRANKLIN'S GROUSE.—Although not a common bird, the 'Fool-hen' was sometimes seen in the forests of black pine near the Pend d'Oreille River. One sat sedately on a limb while a revolver was emptied at her. The shots having missed, roots and stones were thrown, which she avoided by stiff bows or occasional steps to the side.

11. *Bonasa umbellus togata*. CANADIAN RUFFED GROUSE.—Females and downy young were observed at Diamond Lake, June 13 and 23.

During the early part of July, young were frequently seen in the vicinity of Mt. Carleton. No males were observed.

In August, individuals of this species were commonly seen in the valley of Hoodoo Lake.

12. *Zenaidura macroura*. MOURNING DOVE.—Vicinity of Pullman, during September.

13. *Buteo borealis calurus*. WESTERN REDTAIL.—One was secured at Blue Lake, and another, a young individual, near the Pend d'Oreille River.

14. *Aquila chrysaëtos*. GOLDEN EAGLE. — Kaniksu and Blue Lakes. Not common.
15. *Falco columbarius*. PIGEON HAWK. — Pullman, Washington, October; Hoodoo Valley, August.
16. *Falco sparverius*. AMERICAN SPARROW HAWK. — Sparrow Hawks were common in Hoodoo Valley during the latter part of August.
17. *Pandion haliaëtus carolinensis*. AMERICAN OSPREY. — Pullman, Wash., May 1. Fish Hawks were frequently seen at all the lakes visited. Sometimes they caught fish so large that they could scarcely manage them.
18. *Asio wilsonianus*. LONG-EARED OWL. — One female taken in Hoodoo Valley, Aug. 18.
19. *Asio accipitrinus*. SHORT-EARED OWL. — Found breeding at Pullman, Wash., May 5, and later. The nests, on the ground, are often plowed under by ranchers.
20. *Speotyto cunicularia hypogæa*. BURROWING OWL. — Occasionally seen in the vicinity of Pullman. Nests in burrows of *Spermophilus*.
21. *Ceryle alcyon*. BELTED KINGFISHER. — Diamond Lake and Blue Lake. Not common.
22. *Dryobates villosus harrisii*. HARRIS'S WOODPECKER. — One young individual taken in Hoodoo Valley.
23. *Sphyrapicus varius nuchalis*. RED-NAPED SAPSUCKER. — Common in the vicinity of Diamond Lake.
24. *Colaptes cafer*. RED-SHAFTED FLICKER. — Pullman. From March to September. Not common.
25. *Chordeiles virginianus*. NIGHTHAWK. — Abundant at Diamond Lake and at all points visited in Idaho. Downy young were found at Blue Lake, July 20.
26. *Trochilus alexandri*. BLACK-CHINNED HUMMINGBIRD. — One female taken at Blue Lake, July 10. Not common.
27. *Selasphorus rufus*. RUFUS HUMMINGBIRD. — One male and a nest containing two young were observed at Blue Lake, July 17.
28. *Otocoris alpestris arenicola* (sub. sp.?). DESERT HORNED LARK. — Common at Pullman. They were observed in flocks with *Anthus*, Oct. 21. Abundant in March and April. Nestlings seen Apr. 25.
29. *Pica pica hudsonica*. AMERICAN MAGPIE. — Hoodoo Lake, Aug. 16. Common in winter.
30. *Cyanocitta stelleri annectens*. BLACK-HEADED JAY. — At high altitudes near Blue Lake. Not common.
31. *Sturnella neglecta*. WESTERN MEADOWLARK. — Common at Pullman. Abundant during September, March and April. Not seen in winter.
32. *Poœcetes gramineus confinis*. WESTERN VESPER SPARROW. — Pullman. Numerous small flocks seen in September and April.
33. *Zonotrichia leucophrys intermedia*. INTERMEDIATE SPARROW. — Pullman; common in April.

34. *Spizella monticola ochracea*. WESTERN TREE SPARROW.—Pullman; common during April. They frequent the thickets bordering the creeks, where the first ones were taken, March 3. The ground was covered with snow at that time.
35. *Junco hyemalis connectens* *Coues*.—A Junco which I identify as above, possibly incorrectly, was common everywhere. Pullman, Mar. 31. Nesting in the vicinity of Mt. Carleton, July 4. Young were seen at Blue Lake, July 18.
36. *Melospiza melodia montana*. MOUNTAIN SONG SPARROW.—Common in flocks with *Spizella monticola ochracea* in the vicinity of Pullman during the first week of March. Common on the low meadows bordering Blue Lake.
37. *Passerella iliaca schistacea*. SLATE-COLORED SPARROW.—Pullman. Usually seen perched on the topmost twig of some bush, singing vigorously.
38. *Piranga ludoviciana*. LOUISIANA Tanager.—Frequently seen at Blue Lake.
39. *Ampelis cedrorum*. CEDAR WAXWING.—Small flocks of these birds were occasionally seen at Blue Lake.
40. *Geothlypis tolmiei*. MACGILLIVRAY'S WARBLER.—Near Mt. Carleton in open woods. A nest with eggs was seen, June 30.
41. *Anthus pensilvanicus*. AMERICAN PIPIT.—Abundant at Pullman during the latter part of October in flocks with *Otocoris*.
42. *Sitta canadensis*. RED-BREASTED NUTHATCH.—Blanchard Valley, on the east slope of Mt. Carleton.
43. *Regulus calendula*. RUBY-CROWNED KINGLET.—Pullman; common during April.
44. *Hylocichla ustulatus swainsonii*. OLIVE-BACKED THRUSH.—Common at Blue Lake during the latter part of July. Also observed in Hoodoo Valley.
45. *Merula migratoria propinqua*. WESTERN ROBIN.—Robins were seen in every locality visited. They were common in flocks at Pullman during September. In the Spring (March 3) they returned before the snow melted, and began nesting so early that the eggs and young birds were frequently frozen.